

AMENDMENTS

Amendments to the Claims:

Please cancel claims 1-24 without prejudice or disclaimer, and please enter new claims 25-53 as set forth in the complete listing of the claims that follows. This complete listing of the claims replaces previous claim listings.

1-24 (Cancelled).

25 (New). A method for activating an antigen presenting cell, which comprises:

transducing an antigen presenting cell with a nucleic acid having a nucleotide sequence that encodes a chimeric protein, wherein the chimeric protein comprises a membrane targeting region, a ligand-binding region and a CD40 cytoplasmic polypeptide region lacking the CD40 extracellular domain; and

contacting the antigen presenting cell with a non-protein multimeric ligand that binds to the ligand-binding region;

whereby the antigen presenting cell is activated.

26 (New). The method of claim 25, wherein the membrane targeting region is a myristoylation targeting region.

27 (New). The method of claim 25, wherein the CD40 cytoplasmic polypeptide region is encoded by a polynucleotide sequence in SEQ ID NO: 1.

28 (New). The method of claim 25, wherein the ligand is a small molecule.

29 (New). The method of claim 28, wherein the ligand is dimeric.

30 (New). The method of claim 29, wherein the ligand is a dimeric FK506 or a dimeric FK506 analog.

31 (New). The method of claim 30, wherein the ligand is AP1903.

32 (New). The method of claim 25, wherein the nucleic acid is contained within a viral vector.

33 (New). The method of claim 32, wherein the viral vector is an adenoviral vector.

34 (New). The method of claim 25, wherein the antigen presenting cell is contacted with an antigen.

35 (New). The method of claim 34, wherein the antigen presenting cell is contacted with the antigen *ex vivo*.

36 (New). The method of claim 34, wherein the antigen presenting cell is in a subject and an immune response is generated against the antigen.

37 (New). The method of claim 36, wherein the immune response is a cytotoxic T-lymphocyte (CTL) immune response.

38 (New). The method of claim 36, wherein the immune response is generated against a tumor antigen.

39 (New). The method of claim 36, wherein the antigen presenting cell is transduced with the nucleic acid *ex vivo* and administered to the subject by intradermal administration.

40 (New). The method of claim 36, wherein the antigen presenting cell is transduced with the nucleic acid *ex vivo* and administered to the subject by subcutaneous administration.

41 (New). The method of claim 25, wherein the antigen presenting cell is transduced with the nucleic acid *ex vivo*.

42 (New). The method of claim 25, wherein the antigen presenting cell is transduced with the nucleic acid *in vivo*.

43 (New). The method of claim 25, wherein the antigen presenting cell is a dendritic cell.

44 (New). A composition which comprises a nucleic acid having a polynucleotide sequence that encodes a chimeric protein, wherein the chimeric protein comprises a membrane targeting region, a ligand-binding region that binds to a multimeric non-protein ligand, and a CD40 cytoplasmic polypeptide region lacking the CD40 extracellular domain.

45 (New). The composition of claim 44, wherein the membrane targeting region is a myristoylation targeting region.

46 (New). The composition of claim 44, wherein the CD40 cytoplasmic polypeptide region is encoded by a polynucleotide sequence in SEQ ID NO: 1.

47 (New). The composition of claim 44, wherein the ligand is a small molecule.

48 (New). The composition of claim 47, wherein the ligand is dimeric.

49 (New). The composition of claim 48, wherein the ligand is a dimeric FK506 or a dimeric FK506 analog.

50 (New). The composition of claim 49, wherein the ligand is AP1903.

51 (New). The composition of claim 44, wherein the nucleic acid is contained within a viral vector.

52 (New). The composition of claim 51, wherein the viral vector is an adenoviral vector.

53 (New). The composition of claim 44, wherein the nucleic acid comprises a promoter sequence operably linked to the polynucleotide sequence.